REMARKS

By this amendment, claims 1, 2, 6-9 and 10 have been amended. Currently, claims 1-10 are pending in the application.

Claims 1, 2, 4, 6 and 7 were rejected under 35 USC 102(e) as being anticipated by Nakaminami et al. (U.S. Patent No. 6,349,626).

Claim 5 was also rejected under 35 USC 103(a) as being obvious over Nakaminami et al.

The Examiner believed that Nakaminami et al. disclosed a clamping device for a machine tool that comprises a fixed bed, a movable carriage with a movable fitting member and a stationary fitting member. The Examiner also believed that the stationary fitting members have a wedge surface and are tilted downwardly. The Examiner also believed that Nakaminami et al. teaches a backup member (28a) (See Col. 4, lines 23-26) for supporting the surface opposite to the wedge surface of the movable fitting member.

These rejections are respectfully traversed in view of the amendments to the claims and the following remarks.

The present invention relates to a clamping device for a machine tool which has a movable carriage which is linearly movable on a fixed bed and which needs to be clamped to the fixed bed at a

specific position during machining. A clamping device for a machine tool of the present invention comprises a fixed bed, a movable carriage mounted on the fixed bed, a stationary fitting member fixed to the fixed bed and having a fitting surface, a movable fitting member having a wedge surface moved by a driving mechanism to engage the fitting surface of the stationary fitting member when the carriage needs to be fixed to the fixed bed and disengage the surface when the carriage is moved to another position.

By virtue of the wedging action of the wedge-shaped fitting surfaces of the stationary fitting member and the movable fitting member when they are fit together, the drive structure can be simplified because the movable fitting member is driven in advance and retreat motions by a simple mechanism. As a result, the device as a whole can be made compact and the number of parts involved can be reduced.

Claim 1 has been amended to recite "a movable fitting member provided on the movable carriage, the movable fitting member being movable in a direction substantially perpendicular to the mounting surface".

Nakaminami et al. relates to a clamping device for a machine tool capable of preventing the occurrence of impressions and more particularly, to a clamping device having a cylinder mechanism

which is arranged so that left and right inner walls in a recess provided in a fixed bed are pressed by a pair of pistons (See Abstract).

Nakaminami et al. discloses a slant type bed (2) having a tool post (5) which is right-and-left movably set (See Col. 3, line 40-46). Nakaminami et al. also discloses a fixed rack (38) disposed on the right inner wall (21b) of the recess portion (21) (See Col. 4, lines 57-59). Nakaminami et al. also discloses a first piston (22) and a second piston disposed so as to be movable back-and-forth along a direction parallel to the top face (2a) of the fixed bed (See Col. 4, lines 43-45).

Nakaminami et al. also disclose that in order to position and fix the tailstock (3), the fixing position of the tailstock (3) is determined, then the first and second pistons (22, 23) are advanced, and that the movable rack (36) fixed to the first position (22) is engaged with the fixed rack (38) while the second piston (23) presses the left inner wall (21a) of the recess portion (21) (See Col. 5, lines 4-10).

Nakaminami et al. do not disclose a movable fitting member being movable in a direction substantially perpendicular to the mounting surface. Nakaminami et al. also do not disclose the other features of claim 1.

For these reasons, it is believed that Nakaminami et al. do not show or suggest the features claimed in claim 1 of the present invention. It is therefore submitted that the claim 1 is allowable over Nakaminami et al.

Claim 7 has been amended to recite "a backup member for contacting a front side face which is on an opposite side of the movable fitting member from the wedge surface".

Nakaminami et al. also disclose a movable rack (36) so as to be stretched to the rod portion (28a) of the first piston (22) and tightly fixed with bolts (See Col. 4, lines 55-57).

However, Nakaminami et al. do not disclose a backup member for contacting an opposite side of the movable fitting member from the wedge surface.

Applicants point out that a backup member for supporting the surface opposite to the wedge surface of the movable fitting member disclosed in Nakaminami et al. is a cylinder rod that extends to an inner wall of a recess so that the inner wall is pressed by the rod.

For these reasons, it is believed that Nakaminami et al. do not show or suggest the present features claimed in claim 7 of the present invention. It is therefore submitted that the claim 7 is allowable over Nakaminami et al.

Claim 3 and 8-10 were rejected under 35 USC 103(a) as being obvious over Nakaminami et al. and in view of Warner (U.S. Patent No. 4,792,267).

These rejections are respectfully traversed in view of the amendments to the claims and the following remarks.

Claim 3 which depends from claim 1 includes all of the limitations claimed in claim 1 including a movable fitting member being movable in a direction substantially perpendicular to the mounting surface.

Applicants also submit that Warner do not make up for the deficiencies in Nakaminami et al.

Warner relates to a carriage for a machine tool (See Abstract). Warner discloses a movable carriage structure (12) mounted on a fixed bed (14). Warner also discloses a recess (See Fig. 1) in the fixed bed (14) wherein a ball screw (50) is mounted. The ball screw is rotatably supported between a motor (54) and bearing (56) (See col. 3, lines 9-12 and Fig. 2).

However, Warner does not disclose a movable fitting member being movable in a direction substantially perpendicular to the mounting surface. Therefore, Warner does not make up for the deficiencies in Nakaminami et al.

It is therefore respectfully submitted that Nakaminami et al. and Warner, individually or in combination, do not disclose or suggest the feature presently claimed in claim 3 and this rejection should be withdrawn.

Claim 8 has been amended to recite "a movable fitting member being movable in a direction substantially perpendicular to the mounting surface of said fixed bed" and "a backup member for contacting a front side face which is on an opposite side of the movable fitting member from the wedge surface". As discussed above in connection with claim 3, Nakaminami et al. and Warner and do not disclose "a movable fitting member being movable in a direction substantially perpendicular to the mounting surface of said fixed bed".

It is therefore respectfully submitted that Nakaminami et al. and Warner, individually or in combination, do not disclose or suggest the features presently claimed in claims 3 and 8-10 and this rejection should be withdrawn.

Applicant would like to mention that claim 6 has been amended to recite "a backup member for contacting a front side face which is on an opposite side of the movable fitting member from the wedge surface". As discussed above in connection with claim 7, Nakaminami et al. do not disclose a backup member for

contacting an opposite side of the movable fitting member from the wedge surface. It is therefore submitted that the claim 6 is also allowable over Nakaminami et al.

Accordingly, applicant respectfully submits that claims 1-10 clearly define over the prior art of record and should be allowed.

If there are any questions or concerns regarding the claim amendments or these remarks or if the Examiner has any suggestions for defining over the prior art of record, the Examiner is requested to telephone the undersigned at the telephone number listed below.

Respectfully submitted,

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